

Uniform Building Code Commission Staff Comment Form - FGMP 41

FGMP Technical Committee

Review of the 2021 Editions of the International Fuel Gas Code® (IFGC®), International Mechanical Code® (IMC®), International Plumbing Code® (IPC®)

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Code Change Information

Originating Committee: FGMP 2015 Code Modified: 2018 IPC

Original Comment Form Number: FGMP 47 Rule Number: 748:20-16-16 (1), (3), & (4)

& 115

Which area of the code (Section, Table, Figure) was revised?

Chapter 11, Section 1101.7, 1108.3, and Page Number: 11-1; and 11-9

Table 1108.1

Previous Change:

1101.7 Roof design. Roofs shall be designed for the maximum possible depth of water that will pond thereon as determined by the relative levels of roof deck and overflow weirs, scuppers, edges or serviceable drains in combination with the deflected structural elements. In determining the maximum possible depth of water, all primary roof drainage means shall be assumed to be blocked. The maximum possible depth of water on the roof shall include the height of the water required above the inlet of the secondary roof drainage means to achieve the required flow rate of secondary drainage means to accommodate the design rainfall rate as required by Section 1108.

See Table 1108.1 Size of Secondary Scuppers for a 10.2-inch Per Hour Rate of Rainfall.

1108.3 Sizing of secondary drains. Secondary (emergency) roof drain systems or scuppers shall be sized in accordance with Section 1106 1108 based on a rainfall rate for which the primary system is designed of 10.2 inches per hour. In sizing secondary roof drain systems using Tables 1106.2, 1106.3 and 1106.6, the Horizontally Projected Roof Area shall be determined by dividing the Horizontally Projected Roof Area for 1-inch rain fall per hour rate by 10.2 inches per hour. Scuppers

shall be sized to prevent the depth of ponding water from exceeding that for which the roof was designed as determined by Section 1101.7. Scuppers shall not have an opening dimension of less than 4 inches (102 mm). The flow through the primary system shall not be considered when sizing the secondary roof drain system or scuppers. Scuppers shall be sized in accordance with Table 1108.1 or by other national methods using the head height of water and flow rate of the scupper.

HEAD IN	HORIZONTALLY PROJECTED ROOF AREA (SQUARE FEET) LENGTH OF WEIR IN INCHES						
INCHES							
	<u>4</u>	<u>6</u>	<u>8</u>	<u>12</u>	<u>16</u>	<u>20</u>	<u>24</u>
1	<u>112</u>	<u>169</u>	<u>226</u>	339	<u>452</u>	<u>565</u>	<u>678</u>
<u>2</u>	314	471	628	942	1256	<u>1571</u>	1885
<u>3</u>	<u>565</u>	848	1130	<u>1696</u>	2262	2828	3393
<u>4</u>	<u>879</u>	<u>1319</u>	<u>1759</u>	<u>2637</u>	<u>3519</u>	<u>4399</u>	<u>5279</u>

For SI: 1 inch +25.4 mm

Footnotes:

- 1. To adjust this table for other than a 10-2-inch design rain fall rate multiply the square footage on the table by 10.2 then divide by the design rainfall rate.
- 2. This table does not apply to scuppers with a vertical opening height that is less than the head height. Example: For 4 inches of design rainfall rate a 4-inch long scupper with a 1-inch head would accommodate 286 square feet $(112 \times 10.2)/4=286$.

Historical information

This section was initially modified in 2009 to require accommodation of rainfall rates of 10.2 inches per hour for a five-minute duration and require minimum design loads. The 2015 committee received an updated request from the same submitter of the 2009 change to address differences in the language between the 2009 and 2015 codes. A table was also added and include a change to the IBC as well. The 2021 code matches the 2018 without the OUBCC modifications.